PERMANENT STORM DRAINS AND ATTACHED STRUCTURES

LONG TERM - POST-CONSTRUCTION BMP'S:

- PERMANENT VEGETATION AND IRRIGATION PRACTICES
- ENERGY DISSIPATORS CUT-OFF WALLS
- WING WALLS AND HEAD-WALLS

SITE MAINTENANCE, INSPECTION AND REPAIR:

INSPECTIONS OF THE CONSTRUCTION SITE SHALL BE CONDUCTED PRIOR TO ANTICIPATED STORM EVENTS AND AFTER ACTUAL STORM EVENTS TO IDENTIFY AREAS CONTRIBUTING TO A STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY AND TO EVALUATE WHETHER MEASURES TO REDUCE POLLUTANT LOADINGS IDENTIFIED ON THIS PLAN ARE ADEQUATE AND PROPERLY IMPLEMENTED IN ACCORDANCE WITH THE TERMS OF THE PERMIT OR WHETHER ADDITIONAL CONTROL MEASURES ARE NEEDED. A RECORD OF THE INSPECTIONS MUST INCLUDE THE DATE OF THE INSPECTION, THE INDIVIDUAL(S) WHO PERFORMED THE INSPECTION, AND THE OBSERVATIONS. THE PERSONS PERFORMING THE SITE INSPECTIONS WILL DECIDE THE APPROPRIATENESS OF IMPLEMENTING THE BMP'S SHOWN ON THIS PLAN AT ANY PARTICULAR CONSTRUCTION PHASE. ADDITIONALLY, THEY WILL DETERMINE IF THE APPROPRIATE BMP'S ARE WORKING, OR NEED TO BE REPAIRED, ENHANCED OR

MONITORING RECORDS:

RECORDS OF ALL INSPECTIONS, COMPLIANCE CERTIFICATIONS, AND NONCOMPLIANCE REPORTING MUST BE RETAINED FOR A PERIOD OF AT LEAST THREE YEARS. WITH THE EXCEPTION OF NONCOMPLIANCE REPORTING, DISCHARGES ARE NOT REQUIRED TO SUBMIT THESE RECORDS.

WATER CONSERVATION:

MAINTAIN WATER DISTRIBUTION EQUIPMENT

REPAIR LEAKS PROMPTLY

SWEEP PAVED AREAS COLLECT DEBRIS PROMPTLY

AND DISPOSE OF PROPERLY

ANY INACTIVE PERIOD.

STORM WATER PROTECTION NOTES: 1. DURING THE RAINY SEASON THE AMOUNT OF EXPOSED SOIL ALLOWED AT ONE TIME SHALL NOT EXCEED THAT WHICH CAN BE ADEQUATELY PROTECTED BY THE PROPERTY OWNER IN THE EVENT OF A RAINSTORM. 125% OF ALL SUPPLIES NEEDED FOR BMP MEASURES SHALL BE RETAINED ON THE JOB SITE IN A MANNER THAT ALLOWS FULL

2. NO AREA BEING DISTURBED SHALL EXCEED 50 ACRES AT ANY GIVEN TIME WITHOUT DEMONSTRATING TO THE SAN DIEGO COUNTY DPW DIRECTOR'S SATISFACTION THAT ADEQUATE EROSION AND SEDIMENT CONTROL CAN BE MAINTAINED. ANY DISTURBED AREA THAT IS NOT ACTIVELY GRADED FOR 10 DAYS MUST BE FULLY PROTECTED FROM EROSION, UNTIL ADEQUATE LONG-TERM PROTECTIONS ARE INSTALLED, THE DISTURBED AREA SHALL BE INCLUDED WHEN CALCULATING THE ACTIVE DISTURBANCE AREA. ALL EROSION CONTROL MEASURES SHALL REMAIN INSTALLED AND MAINTAINED DURING

DEPLOYMENT AND COMPLETE INSTALLATION IN 48 HOURS OR LESS OF A FORECAST RAIN.

3. THE PROPERTY OWNER IS OBLIGATED TO INSURE COMPLIANCE WITH ALL APPLICABLE STORMWATER REGULATIONS AT ALL TIMES. THE BMP'S (BEST MANAGEMENT PRACTICES) THAT HAVE BEEN INCORPORATED INTO THIS PLAN SHALL BE IMPLEMENTED AND MAINTAINED TO EFFECTIVELY PREVENT THE POTENTIALLY NEGATIVE IMPACTS OF THIS PROJECT'S CONSTRUCTION ACTIVITIES ON STORMWATER QUALITY. THE MAINTENANCE OF THE BMP'S IS THE PERMITEE'S RESPONSIBILITY, AND FAILURE TO PROPERLY INSTALL OR MAINTAIN THE BMP'S MAY RESULT IN ENFORCEMENT ACTION BY THE COUNTY OF SAN DIEGO OR OTHERS. IF INSTALLED BMP'S FAIL, THEY MUST BE REPLACED WITH AN ACCEPTABLE ALTERNATE WITHIN 24 HOURS, OR AS SOON AS SAFE TO DO SO.

BMP MAINTENANCE OBLIGATIONS:

1. THE PERMITEE OF THE GRADING SHOWN ON THESE PLANS ACKNOWLEDGES THAT BMP'S (BEST MANAGEMENT PRACTICES) HAVE BEEN INCORPORATED INTO THIS PLAN AND WILL BE IMPLEMENTED AND MAINTAINED TO EFFECTIVELY MINIMIZE THE POTENTIALLY NEGATIVE IMPACTS OF THIS PROJECT'S CONSTRUCTION ACTIVITIES ON STORMWATER QUALITY. FURTHER, THAT THE MAINTENANCE OF THE SELECTED STORMWATER BMP'S SHOWN ON THIS PLAN IS THEIR RESPONSIBILITY, AND FAILURE TO PROPERLY INSTALL OR MAINTAIN THE BMP'S MAY RESULT IN ENFORCEMENT ACTION BY THE COUNTY OF SAN DIEGO OR OTHERS.

COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS GRADING PLANS FOR: DE LA REINA S RESIDENTIAL USE Engineer of Work:

PRIVATE CONTRACT

L-14372 FILE NO. 4200.02

STATUS JOB DESCRIPTION PHONE NUMBER CONTACT PERSON CONTRACTOR NAME

SITE INSPECTION RECORD

DATE OF NSPECT'N	DATE OF STORM	AMOUNT OF PRECIPITATION (INCHES)	OBSERVATION	FOLLOW UP WORK PERFORMED (IF NECESSARY)	NAME OF INSPECTOR

NATIONAL WEATHER SERVICE RECORDING (858) 289-1212

RESPONSIBLE PERSONNEL: RICHARD CAVANAUGH, PHONE NO. (858) 756-3771

INSPECTING EQUIPMENT: ALL CONTRACTORS AND SUBCONTRACTORS

INSPECTING OF BMP'S: RICHARD CAVANAUGH

TRAINING EMPLOYEES ABOUT BMP'S AFFECTING THEIR JOB: ALL CONTRACTORS AND SUBCONTRACTORS

SOURCE IDENTIFICATION:

THE PRIMARY POTENTIAL SOURCE OF POLLUTANTS IS SOIL DISTURBED BY CONSTRUCTION OPERATIONS. IF NOT CONTROLLED, SOIL MAY BE CARRIED OFF-SITE IN THE FORM OF SEDIMENT BY STORM WATER DISCHARGE. OTHER POTENTIAL SOURCES OF POLLUTANTS INCLUDE FUEL SPILLS AND LEAKS FROM THE DIFFERENT VEHICLES AND HEAVY EARTH MOVING EQUIPMENT USED DURING CONSTRUCTION OPERATIONS. ADDITIONALLY, SOLVENTS, OIL BASED PAINTS, AND OTHER MISCELLANEOUS HYDROCARBONS USED DURING CONSTRUCTION OPERATIONS ARE POTENTIAL SOURCES OF POLLUTANTS.

SITE PLAN GENERAL DISCUSSION AND ASSOCIATED INFORMATION:

THE GRADING PLAN CONSISTS OF SHEETS 1-8. THESE SHEETS ARE COMPILED FROM PLANS DEVELOPED AND PROCESSED THROUGH THE GOVERNING AGENCY. THEY MAY INCLUDE INFORMATION FROM MASS GRADING PLANS, ROUGH GRADING PLANS, EROSION CONTROL PLANS AND LANDSCAPING PLANS WHICH PERTAIN TO BEST MANAGEMENT PRACTICES PREVENTION. THEY COMPRISE THE BEST MANAGEMENT PRACTICES PLAN FOR CONTROL OF SEDIMENT AND OTHER POLLUTANTS DURING CONSTRUCTION OF THE PROJECT. SINCE CONSTRUCTION PROJECTS ARE DYNAMIC AND CHANGE FROM DAY TO DAY, SITE CONDITIONS MAY DIFFER FROM THOSE SHOWN ON THE SITE PLAN.

THE ULTIMATE GOAL AT THE END OF CONSTRUCTION IS THAT ALL SLOPES WILL BE PROTECTED BY MAN MADE OR NATURAL BMP'S AND THE TRANSFER OF SEDIMENT AND OTHER POLLUTANTS FROM THE SITE WILL NOT BE GREATER THAN THAT PRIOR TO DEVELOPMENT.

THE SITE PLAN SHOWS:

- LOCATION OF CONTROL PRACTICES USED DURING CONSTRUCTION;
- AREAS OF CUT AND FILL: DRAINAGE PATTERNS AND SLOPES ANTICIPATED AFTER MAJOR
- GRADING ACTIVITIES ARE COMPLETED;
- AREAS OF SOIL DISTURBANCE; SURFACE WATER LOCATIONS;
- AREAS OF POTENTIAL SOIL EROSION WHERE CONTROL PRACTICES
- WILL BE USED DURING CONSTRUCTION; EXISTING AND PLANNED PAVED AREAS AND BUILDINGS (IF KNOWN);
- VIII. VEHICLE STORAGE AND SERVICE AREAS; TO BE SHOWN BY CONTRACTOR
- AREAS OF EXISTING VEGETATION TO BE RETAINED.

REQUIRED DISCUSSION:

TOXIC MATERIALS THAT ARE KNOWN TO HAVE BEEN TREATED, STORED, DISPOSED, SPILLED, OR LEAKED IN SIGNIFICANT QUANTITIES ONTO THE CONSTRUCTION SITE:

NO SIGNIFICANT QUANTITIES OF TOXIC MATERIALS HAVE BEEN TREATED, STORED, DISPOSED, SPILLED OR LEAKED ON THE CONSTRUCTION SITE. DIESEL FUEL FOR CONSTRUCTION OPERATIONS HAS BEEN TEMPORARILY STORED ON-SITE IN ABOVE GROUND TANKS. MINOR SPILLING OF DIESEL FUEL OR MOTOR OIL MAY OCCUR DURING FUELING AND MAINTENANCE OPERATIONS. SUCH MINOR SPILLS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION SUPERINTENDENT WHO SHALL ARRANGE FOR PROPER COLLECTION AND DISPOSAL.

METHODS OF ON-SITE STORAGE AND DISPOSAL OF CONSTRUCTION MATERIALS:

POLLUTANTS (EXCLUDING SEDIMENT) ARE DISPOSED OF OFF-SITE AT DESIGNATED LANDFILLS, USING PROPER HANDLING TECHNIQUES, AND ACCOMPANIED BY REQUIRED MANIFESTATION.

THE NATURE OF FILL MATERIAL AND EXISTING DATA DESCRIBING THE SOIL ON THE CONSTRUCTION SITE:

COPIES OF SOILS INVESTIGATIVE REPORTS CAN BE OBTAINED WITH THE OWNER'S PERMISSION FROM THE SOILS ENGINEER LISTED ON THE GRADING PLAN.

POLLUTANTS (OTHER THAN SEDIMENT) THAT ARE LIKELY TO BE PRESENT IN STORM WATER DISCHARGES IN SIGNIFICANT QUANTITIES:

THERE ARE NO POLLUTANTS OTHER THAN SEDIMENT THAT ARE LIKELY TO BE PRESENT IN STORM WATER DISCHARGES IN SIGNIFICANT QUANTITIES.

CONSTRUCTION SITE AREA:

RUN-OFF COEFFICIENT AFTER CONSTRUCTION: 0.80

RUN-OFF COEFFICIENT PRIOR TO CONSTRUCTION: 0.30

% OF AREA IMPERVIOUS PRIOR TO CONSTRUCTION: 0%

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% OF AREA IMPERVIOUS AFTER CONSTRUCTION: 96.5%

PRACTICES TO MINIMIZE CONTACT OF CONSTRUCTION MATERIALS, EQUIPMENT AND VEHICLES WITH STORM WATER:

FUELING, CLEANING AND MAINTENANCE SHOULD BE PERFORMED AT LOCATIONS THAT ARE FLAT, AND GEOGRAPHICALLY CONTAINED IN ORDER TO FACILITATE CLEANING UP ANY ASSOCIATED SPILLS. ALL TEMPORARY FUEL TANKS LOCATED ON-SITE SHALL BE CONTAINED WITHIN EARTHEN BERMS LINED BY VISQUEEN. VEHICLES AND EQUIPMENT SPREADS MAY BE MOVED FROM TIME TO TIME TO VARIOUS LOCATIONS WITHIN THE PROJECT FOR FUELING, CLEANING, AND MAINTENANCE.

CONSTRUCTION MATERIAL LOADING, UNLOADING AND ACCESS AREAS:

MATERIAL LOADING, UNLOADING AND ACCESS AREAS MAY OCCUR ANYWHERE ON-SITE THAT IS FLAT, CONTAINED BY GEOGRAPHY, AND IS NOT EXPECTED TO BE INUNDATED WITH WATER DURING RAIN STORMS.

PRECONSTRUCTION CONTROL PRACTICES (IF ANY) TO REDUCE SEDIMENT AND OTHER POLLUTANTS IN STORM WATER DISCHARGES:

DISCUSSIONS SHALL OCCUR BETWEEN SITE CONSTRUCTION MANAGEMENT PERSONNEL AND CONTRACTORS PRIOR TO CONSTRUCTION OF ANY GIVEN PHASE OF WORK (i.e. STORM DRAIN CONSTRUCTION). AT THOSE PRE-CON MEETINGS BMP AND IDEAS FOR OTHER CONSTRUCTION POLLUTION PREVENTION MEASURES WILL BE DISCUSSED.

EQUIPMENT STORAGE, CLEANING AND MAINTENANCE AREAS:

AS MENTIONED ABOVE, THE PRIMARY STORAGE, CLEANING AND MAINTENANCE AREAS WILL BE VARIOUS AREAS ON-SITE THAT ARE SECURED BY GEOGRAPHY AND NOT INUNDATED DURING RAINSTORMS.

BEST MANAGEMENT PRACTICES (BMP) FOR EROSION CONTROL AND SEDIMENT CONTROL:

THE FOLLOWING BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL ARE SHOWN ON THE ATTACHED PLANS. SOME ARE FOR SHORT TERM MITIGATION DURING THE CONSTRUCTION PROCESS AND OTHERS ARE FOR LONG TERM MITIGATION AFTER CONSTRUCTION IS COMPLETED.

TRAINING:

SITE DEVELOPMENT MANAGEMENT SHALL ENSURE THAT ALL PERSONNEL INVOLVED IN INSPECTIONS, MAINTENANCE, AND REPAIR OF BMP'S, UNDERSTAND AND ARE QUALIFIED TO PERFORM SUCH TASKS. MEETINGS SHALL BE HELD PERIODICALLY BETWEEN THE VARIOUS CONTRACTORS AND THE ON-SITE CONSTRUCTION SUPERINTENDENT TO DISCUSS POTENTIAL PROBLEMS OR EXISTING PRACTIC THAT CAN BE IMPROVED IN ORDER TO PREVENT POLLUTION DURING FUELING, CLEANING OR MAINTENANCE OPERATIONS.

EROSION AND SEDIMENT CONTROL:

LISTED BELOW ARE BEST MANAGEMENT PRACTICES TO BE USED FOR SOIL STABILIZATION PURPOSES. THEY ARE SHOWN IN DETAIL ON THE FOLLOWING SHEETS. THESE BMP'S HAVE BEEN SELECTED FROM PROVEN METHODS USED FOR CONTROLLING EROSION WITHIN THE GENERAL PROJECT AREA.

SHORT TERM - CONSTRUCTION BMP'S:

- EARTHEN BERMS
- GRAVEL BAGS SILT FENCES
- TEMPORARY STORM DRAINS
- DESILTING BASINS NETTING AND MATTING
- GABION MATS AND CUT-OFF WALLS
- ENERGY DISSIPATORS BLADED SWALES

CONTROL PRACTICES TO REDUCE THE TRACKING OF SEDIMENT ONTO PUBLIC AND PRIVATE ROADS: TRACKING OF SEDIMENT ONTO PUBLIC AND PRIVATE ROADS SHALL BE MITIGATED BY THE INSTALLATION OF GRAVEL PADS AT POINTS OF INGRESS AND EGRESS.

CONTROL PRACTICES TO REDUCE WIND EROSION:

GRADING OPERATIONS WILL COMPLY WITH COUNTY ORDINANCES RELATING TO DUST CONTROL. ADDITIONALLY, ALL FILL MATERIAL WILL BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AND LANDSCAPED OR HYDROSEEDED AS REQUIRED.

NON STORM WATER MANAGEMENT:

THE ONLY NON STORM WATER DISCHARGES ANTICIPATED TO DRAIN OFF-SITE WILL BE FROM LANDSCAPE IRRIGATION, PIPE FLUSHING AND TESTING, STREET WASHING AND POSSIBLE DEWATERING OPERATIONS

RECOGNIZED AND ALLOWED BY THE GENERAL PERMIT.

				PALMA D RETAIL AND I	
	COUNTY APPROVED CHANGES		BENCH MARK	california coordinate index: 298–	
No.	Description Approved b	y Date	DESCRIPTION: BRASS PLATE ON TOP OF CONCRETE HEADWALL MARKED "1938 H-24-25 (H0024)"	Approved Douglas M. Isbell COUNTY ENGINEER	
			LOCATION: APPROX. 300' N'LY OF LAS PLANIDERAS AND APPROX. 15' W'LY OF CL OF VIA DE LA VALLE	Ву:	
			RECORD FROM: SAN DIEGO COUNTY BENCHMARK ELEVATION: 26.162 DATUM: M.S.L.	Date	

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